CLAIMS

What is Claimed is:

1. A circuit for producing a pilot strength measurement message comprising:

a pilot strength measurement message generator operative to receive long term filtered measurement data corresponding to at least one pilot signal, and in response, operative to produce the pilot strength measurement message including at least the received long term filtered measurement data.

2. The circuit of claim 1 wherein the pilot strength measurement message generator is also operative to receive short term filtered measurement data corresponding to the at least one pilot signal, and wherein the pilot strength measurement message further includes at least the short term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is less than a threshold.

3. The circuit of claim 1 wherein the pilot strength measurement message generator is also operative to receive short term filtered measurement data corresponding to the at least one pilot signal, and wherein the at least one pilot signal includes at least one of an active set of pilot signals and a candidate set of pilot signals such that the pilot strength measurement message further includes at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set.

4. The circuit of claim 1 wherein the pilot strength measurement message generator is also operative to receive short term filtered measurement data corresponding to the at least one pilot signal, and wherein the pilot strength measurement message includes at least the long term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold.

5. The circuit of claim 4 wherein the threshold includes a drop threshold plus 3dB.

6. A wireless device for producing a pilot strength measurement message comprising:

a first receiver operative to receive at least one pilot signal, and in response, operative to generate long term filtered measurement data corresponding to the at least one pilot signal;

a second receiver operative to also receive the at least one pilot signal, and in response operative to generate short term filtered measurement data corresponding to the at least one pilot signal; and

a pilot strength measurement message generator, operatively coupled to the first receiver and to the second receiver, and operative to produce the pilot strength measurement message including at least the long term filtered measurement data received from the first receiver.

7. The wireless device of claim 6 wherein the pilot strength measurement message further includes at least the short term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is less than a threshold.

8. The wireless device of claim 6 wherein the at least one pilot signal includes at least one of an active set of pilot signals and a candidate set of pilot signals and wherein the pilot strength measurement message further includes at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set.

9. The wireless device of claim 6 wherein the pilot strength measurement message further includes at least the long term filtered measurement data if the strongest pilot

signal represented by corresponding long term filtered measurement data is greater than a threshold.

10. The wireless device of claim 6 wherein the threshold includes the drop threshold + 3dB.

11. A wireless device for producing a pilot strength measurement message comprising:

a plurality of finger receivers each operative to receive at least one of an active pilot signal and a candidate pilot signal, and in response, operative to generate corresponding long term filtered measurement data;

a scan search receiver also operative to receive the at least one of the active pilot signal and the candidate pilot signal, and in response, operative to generate corresponding short term filtered measurement data; and

a pilot strength measurement message generator, operatively coupled to the plurality of finger receivers and to the scan search receiver, and operative to produce the pilot strength measurement message including at least the long term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data generated by at least one of the plurality of finger receivers is greater than a threshold.

12. The wireless device of claim 11 wherein the pilot strength measurement message includes at least the long term filtered measurement data from the respective plurality of finger receivers if the strongest pilot signal represented by the long term filtered measurement data is less than the first threshold and greater than the second threshold, and if at least one of a number of candidate pilots is greater than three, and a number of active pilots is greater than one, otherwise, the pilot strength measurement message includes at least the short term filtered measurement data.

13. The wireless device of claim 11 wherein the threshold includes a drop threshold +3dB.

14. A method for producing a pilot strength measurement message comprising:

receiving the long term filtered measurement data corresponding to at least one of a plurality of pilot signals, and short term filtered measurement data corresponding to at least one of the plurality of pilot signals; and

producing the pilot strength measurement message based on at least the long term filtered measurement data, in response to receiving the long term filtered measurement data corresponding to at least one of the plurality of pilot signals, and the short term filtered measurement data corresponding to at least one of the plurality of pilot signals.

15. The method of claim 14 further including:

producing the pilot strength measurement message based on at least the short term filtered measurement data if a strongest pilot signal represented by corresponding long term filtered measurement data is less than a threshold.

16. The method of claim 14 further including:

receiving an active set of pilot signals and a candidate set of pilot signals, and

producing the pilot strength measurement message including at least the short term filtered measurement data based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set.

17. A method for producing a pilot strength measurement message comprising:

receiving a plurality of pilot signals;

producing long term filtered measurement data corresponding to at least one of the plurality of pilot signals;

producing short term filtered measurement data corresponding to at least one of the plurality of pilot signals;

producing the pilot strength measurement message including at least the long term filtered measurement data corresponding to at least one of the pilot signals, when a strongest pilot signal represented by corresponding long term filtered measurement data is greater than a threshold.

18. The method of claim 17 further including:

receiving an active set of pilot signals and a candidate set of pilot signals, and

producing the pilot strength measurement message including at least one of the long term filtered measurement data and the short term filtered measurement data, based on at least one of a number of pilot signals in the active set, and a number of pilot signals in the candidate set.

19. The method of claim 17 further including:

receiving an active set of pilot signals and a candidate set of pilot signals,

producing the pilot strength measurement message including at least the long term filtered measurement data when the strongest pilot signal represented by corresponding long term filtered measurement data is less than the first drop threshold and greater than the second threshold and at least one of when a number of candidate pilots is greater than one, and when a number of active pilots is greater than two.

20. A memory containing instructions executable by one or more processing devices that causes the one or more processing devices to:

receive long term filtered measurement data corresponding to at least one of a plurality of pilot signals, and short term filtered measurement data corresponding to at least one of the plurality of pilot signals

produce a pilot strength measurement message based on at least the long term filtered measurement data, in response to the received long term filtered measurement data

corresponding to at least one of a plurality of pilot signals, and the received short term filtered measurement data corresponding to at least one of the plurality of pilot signals.

21. The memory of claim 20 containing executable instructions that cause the one or more processing devices to produce the pilot strength measurement message based on at least the short term filtered measurement data when a strongest pilot signal represented by corresponding long term filtered measurement data is less than a threshold.